UDC 551.577.21(424+429)

METEOROLOGICAL OFFICE

London Road, Bracknell, Berkshire.

HYDROLOGICAL MEMORANDUM No. 17

Rainfall over the areas of the South Wales, Glamorgan, Wye and Usk River Boards, 1916—1950.

by

E.H.Rowsell

ORGS UKMO H

National Meteorological Library
FitzRoy Road, Exeter, Devon. EX1 3PB

Hydrological Services (Met.O.8)

1963 Edition (Reprinted January 1973)

HYDROLOGICAL MEMORANDA NO 17

Rainfall over the areas of the South Wales, Glamorgan, Wye and Usk River Boards 1916-1950

1. Rainfall, 1916-1950

1.1. Introduction. The estimation of standard-period averages for the months or for the year, is carried out in three stages; the selection of sound, homogeneous records complete for the 35 years, 1916-50, which provide arithmetic means of monthly and annual rainfall, the basic values for all other work; the estimation of standard-period, annual averages for short-period stations; the estimation of standard-period, monthly averages for stations in the second group, where these are needed for special purposes.

A detailed account of the methods developed and used in the Meteorological Office (Met O 8) to estimate standard-period averages for short-period records, is given in Hydrological Memoranda No 5.

It is possible to process the data in a number of ways but the maps and tables are presented here in the simplest, most precise forms in order to be of use to a wide range of enquirers.

1.2. The Primary Survey, for Great Britain and Northern Ireland, of stations with complete records during 1916-1950, included some cases where the site had been changed to one with a better exposure and observations from both sites had been recorded for a few years. Attempts were made to amend the earlier readings by comparison of the data during a period of overlap, in order to have a set of values from 1916, to the date of the change, which would be representative of the later, and better, record. But since the earlier exposures were usually unsatisfactory (being over-exposed or over-sheltered), the results were mostly erratic and the amended sets of values were not homogeneous. In a few cases, small breaks in a long record were completed by using estimated values, based on a nearby station, with or without the use of a modifying factor.

Of the many records examined, monthly and annual averages were accepted for 56 stations, 11 for South Wales, 18 for Glamorgan, 14 for the Wye and 13 for the Usk River Boards.
The accepted values (in inches), together with the proportions (per cent) of each monthly average to the annual average, are given in Table I, together with the altitude and the National Grid reference for each station. Most of these averages were included in HMSO publication, MO 635, "Averages of Rainfall for Great Britain and Northern Ireland, 1916-1950", some were omitted because other stations were so near.

The percentage proportion of monthly averages to the annual averages for the long-period stations were used to draw a series of twelve monthly maps from which it is possible to estimate the percentage of average annual rainfall, for any place, for each month of the year. These maps are shown in Figure 1. Values estimated for a few points between the isopercental lines have been added to give a clearer indication of the variations from place to place. The points chosen are not necessarily the same for each map.

1.3. The Secondary Survey of short-period stations was undertaken next, using records up to the time of the survey, usually into the late 1950's. Long-period stations, whose averages had been rejected from the Primary Survey because the record was not homogeneous, were examined again and averages were estimated for the later (and usually improved) part of the series of observations. Averages based on data for less than 5 years were not usually accepted for publication. A list of the accepted averages, for the short-period stations, is given in Table II together with the altitude and National Grid reference for each. The stations are listed in an order based on natural drainage areas which will be used for the first time in British Rainfall, 1961.

These averages, together with the long-period averages listed in Table I, were plotted on Ordnance Survey Maps (scale, 4 miles to the inch), and used to draw the lines of average annual rainfall, 1916-1950. The map is shown as Figure 2. The Secondary Survey is frequently revised for special areas using the most up-to-date observations for relatively new stations and the map is subject to revision from time to time. The redrawing of the isohyets usually results in greater detail and perhaps a clearer definition of a wet area as more and more observations become available from improved River Board networks of rain-gauges. Drastic changes are not expected. In Tables I, II and III, with a few exceptions, the averages quoted are for records still being maintained in 1963.

1.4. Monthly Averages for a further group of stations were next estimated for use in the Monthly Weather Report and for enquiries. For this purpose some stations were chosen from those listed in Table II to supplement those listed in Table I. To find the monthly averages, the monthly proportions (per cent of annual average) were chosen from the equipercental maps (see Fig 1) so that the total for the twelve months was 100. These monthly percentages were then used to apportion the annual average (in inches) amongst the months. The results are given in Table III.

1.5. Daily Rainfall, 1916-50. Five of the initial 56 records which were accepted for the Primary Survey (1.2.) were analysed further. These records had regular daily entries, for the 24-hour period 0900 to 0900, for each of the 35 years, 1916-1950. Table IVa gives, for each of the stations, the 35-year totals for each day of the year (in inches). Table IVb gives 1/35 of all possible totals from .17 in to 24.67 in, thus providing a reduction table for the values in IVa to give average daily falls from "trace" to .70 in. For 29 February the reduction factor is, of course, 1/9.

These daily averages can be re-grouped as 5-day means, 7-day means, consecutive or sliding means or in whatever form suits a specific requirement.

2. Frequencies of Daily Rainfall, 1916-1950. The same set of daily values used for Table IVa were re-grouped to give frequency tables with intervals of .01 inch. These have been re-arranged in Table V, to give accumulated frequencies with intervals of .10 in up to 2.50 in and a wider grouping above this.

3. Extremes of Rainfall. The records for the 35-year period, 1916-1950, for the stations used in Tables IV and V were also used to find maximum and minimum values for the year and for each month and also maximum daily values for each month. These maxima and minima are given in Table VI and Table VII. Additional extremes are given in these tables to cover the 50-year period, 1911-1960.

Appendix I

Intense Falls. Falls of 2 hours or less, which have been recorded in British Rainfall and rank as "noteworthy", "remarkable" or "very rare", are listed in Appendix I.

TABLE I. Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas

Wye River Board

Station	County	Alt. Ft.	N.G.R.	Jan	Feb	Mar	Apr	May	June	Jly	Aug	Sep	Oct	Nov	Dec	Year	
Aberhenllan	Radnorshire	1070	SN(22)898717	7.85	6.05	4.20	4.22	3.83	3.58	4.90	5.22	5.36	7.19	7.41	7.68	67.49	Inch
				11.6	9.0	6.2	6.2	5.7	5.3	7.3	7.7	7.9	10.7	11.0	11.4	100.0	%
Figin	"	1620	SN(22)828715	9.64	7.41	5.37	5.24	4.74	5.03	6.84	7.19	7.21	9.04	9.03	9.13	85.87	Inch
				11.2	8.6	6.3	6.1	5.5	5.9	8.0	8.4	8.4	10.5	10.5	10.6	100.0	%
Llyn Gynon	Cardiganshire	1450	SN(22)801651	7.83	5.78	4.47	4.35	4.09	4.29	5.92	6.06	6.09	7.63	7.57	7.73	71.81	Inch
				10.9	8.1	6.2	6.1	5.7	6.0	8.2	8.4	8.5	10.6	10.5	10.8	100.0	%
Esgair y Gader	Radnorshire	1655	SN(22)859665	8.17	6.11	4.55	4.48	4.04	3.95	5.47	5.71	5.99	7.57	7.76	7.91	71.71	Inch
				11.4	8.5	6.3	6.3	5.6	5.5	7.6	8.0	8.4	10.6	10.8	11.0	100.0	%
Nant-y-car	Brecknock-shire	1560	SN(22)877617	9.45	6.67	5.09	4.79	4.57	4.28	5.79	6.27	6.27	8.24	8.60	8.91	78.93	Inch
				12.0	8.5	6.5	6.1	5.8	5.4	7.3	7.9	7.9	10.4	10.9	11.3	100.0	%
Cors-yr-hwch	"	1805	SN(22)859600	10.73	7.46	6.17	5.74	5.12	5.02	6.87	7.34	7.34	9.28	9.75	9.97	90.79	Inch
				11.8	8.2	6.8	6.3	5.7	5.5	7.6	8.1	8.1	10.2	10.7	11.0	100.0	%
Llysdinam	"	646	SO(32)009585	5.03	3.52	2.77	2.85	2.96	2.66	3.41	3.47	3.43	4.69	4.83	4.75	44.37	Inch
				11.3	7.9	6.3	6.4	6.7	6.0	7.7	7.8	7.7	10.6	10.9	10.7	100.0	%
Trallwn	"	1000	SN(22)878541	9.70	6.41	4.94	4.76	4.91	4.50	5.74	6.17	6.39	8.22	8.78	8.93	79.45	Inch
				12.2	8.1	6.2	6.0	6.2	5.7	7.2	7.8	8.0	10.3	11.1	11.2	100.00	%
Sarnesfield Grange	Hereford-shire	400	SO(32)368509	2.97	2.14	1.92	1.95	2.24	1.78	2.42	2.66	2.26	3.03	3.12	2.62	29.11	Inch
				10.2	7.4	6.6	6.7	7.7	6.1	8.3	9.1	7.8	10.4	10.7	9.0	100.0	%
Breinton Court	"	238	SO(32)470396	2.58	1.78	1.77	1.79	2.16	1.65	2.28	2.42	2.27	2.69	2.71	2.30	26.40	Inch
				9.8	6.7	6.7	6.8	8.2	6.2	8.6	9.2	8.6	10.2	10.3	8.7	100.0	%
Grantsfield	"	424	SO(32)526603	2.79	1.94	1.83	2.01	2.44	1.76	2.52	2.57	2.24	2.80	2.86	2.55	28.31	Inch
				9.9	6.8	6.5	7.1	8.6	6.2	8.9	9.1	7.9	9.9	10.1	9.0	100.0	%

TABLE I. Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas (continued)

Wye River Board (continued)

Station County	Alt. Ft.	N.G.R.	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Year	
Ross-on-Wye Herefordshire	223	SO(32)598233	2.90	2.01	1.94	1.96	2.17	1.49	2.29	2.38	2.30	2.81	2.91	2.71	27.87	Inch
			10.4	7.2	7.0	7.0	7.8	5.4	8.2	8.5	8.3	10.1	10.4	9.7	100.0	%
Walford, Hill Court. "	126	SO(32)575215	3.06	2.13	2.00	1.98	2.21	1.62	2.37	2.57	2.35	2.96	3.04	2.82	29.11	Inch
			10.5	7.3	6.9	6.8	7.6	5.6	8.1	8.8	8.1	10.2	10.4	9.7	100.0	%
Vowchurch "	410	SO(32)349362	4.10	2.73	2.47	2.46	2.59	1.98	2.72	2.89	2.68	3.58	4.06	3.69	33.95	Inch
			11.4	7.6	6.9	6.8	7.2	5.5	7.6	8.0	7.5	9.9	11.3	10.3	100.0	%
Usk River Board																
Newchurch Monmouthshire	490	ST(31)437964	4.84	3.19	3.03	2.84	2.97	2.49	3.77	4.09	3.75	4.66	4.68	4.55	44.86	Inch
			10.8	7.1	6.8	6.3	6.6	5.6	8.4	9.1	8.4	10.4	10.4	10.1	100.0	%
Nantypridd "	500	ST(31)436944	4.65	3.03	2.83	2.73	2.93	2.47	3.72	4.16	3.71	4.55	4.45	4.33	43.56	Inch
			10.7	7.0	6.5	6.3	6.7	5.7	8.5	9.6	8.5	10.4	10.2	9.9	100.0	%
Llanvaches "	456	ST(31)428929	4.39	2.84	2.62	2.56	2.76	2.31	3.40	3.78	3.41	4.25	4.19	4.07	40.58	Inch
			10.8	7.0	6.5	6.3	6.8	5.7	8.4	9.3	8.4	10.5	10.3	10.0	100.0	%
Cray Reservoir No. 2. Brecknockshire	1019	SN(22)880210	10.15	6.63	5.71	5.13	4.96	4.69	6.40	6.99	6.35	9.01	9.24	9.59	84.85	Inch
			12.0	7.8	6.7	6.1	5.9	5.5	7.5	8.2	7.5	10.6	10.9	11.3	100.0	%
Grwyne Fawr "	1787	SO(32)233307	6.27	4.64	4.06	4.02	3.89	3.28	4.31	4.78	4.61	6.08	6.16	6.03	58.13	Inch
			10.8	8.0	7.0	6.9	6.7	5.6	7.4	8.2	7.9	10.5	10.6	10.4	100.0	%
Blaen-y-cum "	1423	SO(32)246295	5.94	4.47	3.83	3.98	3.72	3.10	4.22	4.60	4.51	5.88	6.04	5.84	56.13	Inch
			10.6	8.0	6.8	7.1	6.6	5.5	7.5	8.2	8.0	10.5	10.8	10.4	100.0	%
Coed Dias Monmouthshire	900	SO(32)275244	4.78	3.62	3.24	3.30	3.06	2.50	3.54	3.71	3.57	4.71	4.95	4.76	45.74	Inch
			10.5	7.9	7.1	7.2	6.7	5.5	7.7	8.1	7.8	10.3	10.8	10.4	100.0	%

TABLE I Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas (continued)

Usk River Board (continued)

Station	County	Alt. Ft.	N.G.R.	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Year	
Llangynidr No.2	Brecknockshire	1471	SO(32)15143	8.14	5.40	4.43	4.18	3.86	3.48	4.69	5.04	4.98	7.30	7.19	7.41	66.10	Inch
				12.3	8.2	6.7	6.3	5.8	5.3	7.1	7.6	7.5	11.1	10.9	11.2	100.0	%
Llangynidr No.3	"	1468	SO(32)150141	8.41	5.56	4.51	4.26	3.95	3.55	4.78	5.18	5.16	7.45	7.40	7.59	67.80	Inch
				12.4	8.2	6.7	6.3	5.8	5.2	7.1	7.6	7.6	11.0	10.9	11.2	100.0	%
Carno, East	"	1391	SO(32)163136	7.71	5.11	4.26	4.06	3.70	3.31	4.44	4.77	4.76	7.02	6.92	7.16	63.22	Inch
				12.2	8.1	6.7	6.4	5.9	5.2	7.0	7.6	7.5	11.1	11.0	11.3	100.0	%
Carno, West	"	1412	SO(32)156132	8.03	5.35	4.44	4.26	3.86	3.45	4.61	5.06	5.02	7.33	7.17	7.48	66.06	Inch
				12.2	8.1	6.7	6.4	5.8	5.2	7.0	7.7	7.6	11.1	10.9	11.3	100.0	%
Carno, South	Monmouthshire	1262	SO(32)164128	7.91	5.22	4.37	4.18	3.83	3.37	4.50	4.92	4.86	7.08	6.98	7.38	64.60	Inch
				12.2	8.1	6.8	6.5	5.9	5.2	7.0	7.6	7.5	11.0	10.8	11.4	100.0	%
Abertillery Park	"	700	SO(32)207049	6.84	4.55	3.97	3.65	3.72	3.22	4.51	4.68	4.49	6.37	6.34	6.33	58.67	Inch
				11.7	7.7	6.8	6.2	6.3	5.5	7.7	8.0	7.6	10.9	10.8	10.8	100.0	%
Glamorgan River Board																	
Cardiff	Glamorgan	202	ST(31)195793	4.58	3.00	2.54	2.56	2.92	2.28	3.43	3.87	3.68	4.50	4.39	4.35	42.10	Inch
				10.9	7.1	6.0	6.1	6.9	5.4	8.2	9.2	8.8	10.7	10.4	10.3	100.0	%
Cardiff, Heath Filters	"	132	ST(31)181799	4.83	3.26	2.65	2.68	2.99	2.31	3.48	3.98	3.74	4.66	4.60	4.61	43.79	Inch
				11.0	7.5	6.1	6.1	6.8	5.3	8.0	9.1	8.5	10.6	10.5	10.5	100.0	%
Cardiff, Roath Park	"	51	ST(31)199787	4.71	3.16	2.66	2.68	2.98	2.31	3.42	3.97	3.81	4.64	4.50	4.48	43.32	Inch
				10.9	7.3	6.1	6.2	6.9	5.3	7.9	9.2	8.8	10.7	10.4	10.3	100.0	%

TABLE I Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas (continued)

Glamorgan River Board (continued)

Station County	Alt. Ft.	N.G.R.	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Year	
Beacons Reservoir Brecknockshire	1357	SN(22)987192	9.91	6.82	5.21	5.12	4.75	4.80	6.51	6.87	6.71	8.91	9.23	9.10	83.94	Inch
			11.8	8.1	6.2	6.1	5.7	5.7	7.8	8.2	8.0	10.6	11.0	10.8	100.0	%
Cantref Reservoir "	1120	SN(22)995155	8.82	6.14	4.55	4.47	4.18	4.26	5.57	5.97	5.77	7.94	7.99	8.00	73.66	Inch
			12.0	8.3	6.2	6.1	5.7	5.8	7.5	8.1	7.8	10.8	10.8	10.9	100.0	%
Neuadd Reservoir No. 6. "	2099	SO(32)011209	11.86	7.71	6.68	5.92	5.57	5.68	7.82	8.16	7.88	10.44	10.57	10.62	98.91	Inch
			12.0	7.8	6.8	6.0	5.6	5.7	7.9	8.2	8.0	10.6	10.7	10.7	100.0	%
Neuadd Reservoir No. 8. "	1723	SO(32)019202	10.81	6.84	5.74	5.50	5.16	5.10	6.96	7.44	7.21	9.43	9.76	9.74	89.69	Inch
			12.0	7.6	6.4	6.1	5.8	5.7	7.8	8.3	8.0	10.5	10.9	10.9	100.0	%
Neuadd Reservoir No. 10. "	1700	SO(32)032193	9.07	6.04	5.00	4.95	4.52	4.32	5.97	6.18	6.06	8.19	8.44	8.37	77.11	Inch
			11.8	7.8	6.5	6.4	5.9	5.6	7.7	8.0	7.9	10.6	10.9	10.9	100.0	%
Pentwyn Reservoir "	1120	SO(32)056145	8.44	5.80	4.59	4.44	4.12	3.86	5.39	5.67	5.61	7.64	7.80	7.68	71.04	Inch
			11.9	8.2	6.5	6.2	5.8	5.4	7.6	8.0	7.9	10.7	11.0	10.8	100.0	%
Treharris Reservoir. Glamorgan	765	ST(31)098975	6.66	4.44	3.45	3.12	3.31	2.88	4.17	4.42	4.43	6.30	6.45	6.36	55.99	Inch
			11.9	7.9	6.2	5.6	5.9	5.1	7.4	7.9	7.9	11.3	11.5	11.4	100.0	%
Treherbert, Tyn-y-Waun No. 1. "	801	SS(21)932994	11.58	8.02	5.83	5.38	4.96	4.85	7.05	7.65	7.37	9.86	10.42	10.61	93.58	Inch
			12.4	8.6	6.2	5.8	5.3	5.2	7.5	8.2	7.9	10.5	11.1	11.3	100.0	%
Treherbert, Tyn-y-Waun No. 2. "	801	SS(21)932994	11.55	7.98	5.83	5.37	4.98	4.87	7.04	7.67	7.43	9.88	10.46	10.61	93.67	Inch
			12.3	8.5	6.2	5.7	5.3	5.2	7.5	8.2	8.0	10.6	11.2	11.3	100.0	%
Lluest Wen Reservoir "	1280	SN(22)950015	11.56	7.98	5.69	5.11	4.97	5.10	7.10	7.78	7.50	10.13	10.51	10.59	94.02	Inch
			12.3	8.5	6.0	5.4	5.3	5.4	7.5	8.3	8.0	10.8	11.2	11.3	100.0	%

TABLE I Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas (continued)

Glamorgan River Board (continued)

Station County	Alt. Ft.	N.G.R.	Jan	Feb	Mar	Apr	May	Jun	Jly	Aug	Sep	Oct	Nov	Dec	Year	
Lower Penarth Glamorgan	66	ST(31)183697	3.74	2.47	2.07	2.14	2.51	1.86	3.00	3.57	3.36	4.02	3.74	3.56	36.04	Inch
			10.4	6.8	5.7	5.9	7.0	5.2	8.3	9.9	9.3	11.2	10.4	9.9	100.0	%
Merthyr Mawr "	75	SS(21)889779	4.77	3.25	2.73	2.73	2.87	2.42	3.87	4.45	4.29	4.82	4.78	4.60	45.58	Inch
			10.5	7.1	6.0	6.0	6.3	5.3	8.5	9.7	9.4	10.6	10.5	10.1	100.0	%
Llanharan Sewage Works "	175	SS(21)974821	5.42	3.68	2.90	2.98	3.12	2.63	4.26	4.68	4.54	5.29	5.37	5.10	49.97	Inch
			10.8	7.4	5.8	6.0	6.2	5.3	8.5	9.4	9.1	10.6	10.7	10.2	100.0	%
Llyn Fawr Reservoir No. 1. "	1220	SN(22)918033	11.30	7.86	5.74	5.23	4.98	4.87	7.11	7.94	7.69	10.00	10.55	10.60	93.87	Inch
			12.0	8.4	6.1	5.6	5.3	5.2	7.6	8.5	8.2	10.6	11.2	11.3	100.0	%
Briton Ferry "	503	SS(21)752942	5.32	3.62	2.91	2.85	3.06	2.90	4.49	4.60	4.58	5.48	5.47	5.25	50.53	Inch
			10.5	7.2	5.8	5.6	6.1	5.7	8.9	9.1	9.1	10.8	10.8	10.4	100.0	%
S. W. Wales River Board																
Ystalyfera Glamorgan	240	SN(22)768088	8.13	5.25	4.33	3.95	3.96	4.09	5.74	6.17	5.85	7.33	7.59	7.76	70.15	Inch
			11.6	7.5	6.2	5.6	5.6	5.8	8.2	8.8	8.3	10.5	10.8	11.1	100.0	%
Cwmlleidi Waterworks Carmarthenshire	240	SN(22)519031	5.72	3.93	3.12	2.99	3.21	3.08	4.36	4.91	4.71	5.97	5.99	5.50	53.49	Inch
			10.7	7.3	5.8	5.6	6.0	5.8	8.1	9.2	8.8	11.2	11.2	10.3	100.0	%
Llandovery, Grammar School "	220	SN(22)765347	5.85	4.17	3.25	3.17	3.29	3.20	4.08	4.57	4.29	5.85	5.98	5.63	53.33	Inch
			11.0	7.8	6.1	5.9	6.2	6.0	7.6	8.6	8.0	11.0	11.2	10.6	100.0	%
Nant Goch "	1172	SN(22)803233	10.20	6.48	5.61	4.91	5.04	4.43	6.04	6.54	6.26	8.73	8.88	9.55	82.67	Inch
			12.3	7.8	6.8	5.9	6.1	5.4	7.3	7.9	7.6	10.6	10.7	11.6	100.0	%

TABLE I Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas (continued)

S.W. Wales River Board (continued)

Station County	Alt. Ft.	N.G.R.	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year	
Abergorlech Carmarthenshire	245	SN(22)585336	7.01 11.5	4.71 7.7	3.90 6.4	3.52 5.8	3.61 5.9	3.28 5.4	4.75 7.8	5.18 8.5	4.78 7.9	6.65 10.9	6.66 10.9	6.86 11.3	60.91 100.0	Inch %
Brechfa "	290	SN(22)523299	7.53 11.3	4.96 7.5	4.26 6.4	3.82 5.8	3.86 5.8	3.66 5.5	5.26 7.9	5.64 8.5	5.33 8.0	7.36 11.1	7.29 11.0	7.41 11.2	66.38 100.0	Inch %
Stackpole Court Pembrokeshire	60	SR(11)972960	4.93 11.8	3.15 7.5	2.56 6.1	2.24 5.4	2.44 5.8	2.10 5.0	3.31 7.9	3.47 8.3	3.44 8.2	4.63 11.1	4.92 11.7	4.71 11.2	41.90 100.0	Inch %
Maenclochog "	740	SN(22)069300	7.07 11.2	4.75 7.6	3.93 6.2	3.67 5.8	3.53 5.6	3.45 5.5	5.14 8.2	5.06 8.0	5.36 8.5	7.11 11.3	7.01 11.1	6.93 11.0	63.01 100.0	Inch %
Trecwn House "	391	SM(12)975325	5.84 11.1	3.94 7.5	3.25 6.2	3.07 5.8	2.97 5.7	2.89 5.5	4.33 8.2	4.22 8.0	4.44 8.4	5.93 11.3	5.81 11.1	5.87 11.2	52.56 100.0	Inch %
Goodwich, Trenewydd "	300	SM(12)913396	4.51 11.4	2.94 7.5	2.54 6.4	2.25 5.7	2.30 5.8	2.06 5.2	3.12 7.9	3.24 8.2	3.23 8.2	4.39 11.1	4.52 11.5	4.37 11.1	39.47 100.0	Inch %
Cardigan Cardiganshire	40	SN(22)190459	4.69 11.3	3.12 7.5	2.77 6.7	2.41 5.8	2.42 5.8	2.08 5.0	3.18 7.7	3.37 8.1	3.34 8.0	4.80 11.6	4.82 11.6	4.53 10.9	41.53 100.0	Inch %
Abergavenny, Larchfield Monmouthshire †	240	SO(32)305143	4.56 11.8	3.03 7.9	2.70 7.0	2.54 6.6	2.63 6.8	1.90 4.9	2.70 7.0	3.00 7.8	2.79 7.2	3.99 10.3	4.42 11.5	4.33 11.2	38.59 100.0	Inch %
Penmaen, Cefn Mor Glamorgan †	300	SS(21)530687	4.68 10.8	3.15 7.2	2.60 6.0	2.49 5.7	2.68 6.2	2.35 5.4	3.58 8.2	3.90 9.0	3.92 9.0	4.79 11.0	4.89 11.2	4.50 10.3	43.53 100.0	Inch %
Carmarthen, The Friary Carmarthenshire†	62	SN(22)413202	5.78 11.0	3.76 7.2	3.28 6.3	2.96 5.7	3.16 6.0	2.87 5.5	4.13 7.9	4.55 8.7	4.22 8.1	5.78 11.0	6.02 11.5	5.84 11.1	52.35 100.0	Inch %

† Stations now terminated.

TABLE I Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas (continued)

S.W. Wales (continued)

Station	County	Alt. Ft.	N.G.R.	Jan	Feb	Mar	Apr	May	Jun	Jly	Aug	Sep	Oct	Nov	Dec	Year	
Llandilo, Dynevor Castle	Carmarthenshire †	202	SN(22)614224	5.92 11.1	3.92 7.3	3.39 6.4	3.05 5.7	3.36 6.3	2.91 5.5	4.08 7.6	4.50 8.4	4.23 7.9	6.11 11.5	5.96 11.2	5.94 11.1	53.37 100.0	Inch %
Llanddeusant, Pontorynfe	" †	323	SN(22)730242	6.84 11.7	4.60 7.9	3.73 6.4	3.40 5.8	3.55 6.1	3.15 5.4	4.36 7.4	4.87 8.3	4.46 7.6	6.35 10.8	6.56 11.2	6.66 11.4	58.53 100.0	Inch %
Tenby, The Priory	Pembrokeshire †	64	SN(22)135004	4.86 11.3	3.25 7.6	2.72 6.4	2.43 5.7	2.57 6.0	2.12 4.9	3.38 7.9	3.55 8.3	3.61 8.4	4.68 10.9	4.89 11.4	4.78 11.2	42.84 100.0	Inch %
St. Ann's Head, Coastguard St.	" †	142	SM(12)807032	4.20 11.7	2.73 7.6	2.30 6.4	1.78 4.9	2.17 6.0	1.89 5.3	2.75 7.6	2.94 8.2	2.98 8.3	4.01 11.1	4.30 12.0	3.94 10.9	35.99 100.0	Inch %

† Stations now terminated.

TABLE II Estimated Annual Averages of Rainfall (in inches), 1916-1950 for short-period stations. (Wye, Usk, Glamorgan and S.W. Wales River Board Areas).

County	Station	Annual Average in.	Alt. Ft.	N.G.R.
	Wye River Board.			
Montgomeryshire	Manod	86.55	1050	SN(22)840827
"	Dernol	56.49	870	SN(22)914747
Radnorshire	St. Harmon	47.07	918	SN(22)990726
"	Rhayader	49.06	700	SN(22)972680
Montgomeryshire	Glan Fedwen	72.82	1375	SN(22)871759
"	Bod-talog	71.67	1250	SN(22)868749
Cardiganshire	Abergwngu	70.90	1150	SN(22)870734
Radnorshire	Calettwr	74.29	1490	SN(22)875701
"	Abercaethon	70.53	1180	SN(22)870690
"	Tynant	69.17	1020	SN(22)899673
"	Pen-y-gareg	59.13	1530	SN(22)925681
"	Ty'n-y-llidiart	66.46	1006	SN(22)907659
"	Nantgwllt	63.02	840	SN(22)909639
"	Claerwen	70.19	1250	SN(22)820673
Cardiganshire	Claerddu	74.38	1425	SN(22)792686
"	Bwlchyrhendre	71.15	1585	SN(22)807664
Radnorshire	Cerigllwydion	77.14	1710	SN(22)843692
"	Bryn Hir	77.52	1470	SN(22)843681
Brecknockshire	Arban	79.32	1500	SN(22)830629
"	Esgair Garthen	78.09	1590	SN(22)842643
Radnorshire	Ciloerwynt	66.80	1045	SN(22)882629
Brecknockshire	Llyn Carw	84.08	1775	SN(22)851614
"	Esgair Ceiliog	82.90	1560	SN(22)898601
Radnorshire	Tyrmynydd	62.80	832	SN(22)914625
Brecknockshire	Tyn-y-pant	65.33	1320	SN(22)926626
"	Elan Village	57.29	700	SN(22)931649
"	Llanfihangel (Llwynoynar)	52.39	745	SN(22)987568
Radnorshire	Pen Ithon	42.45	1200	SO(32)073813
"	Llanbadarn-fynydd	44.43	974	SO(32)097777
"	Llanddewi-Ystradenny	38.54	767	SO(32)107685
"	Llandrindod Wells	40.63	772	SO(32)061605
Brecknockshire	Abernant	58.51	632	SN(22)887464
"	Llwyn Madoc	62.56	763	SN(22)902525
"	Garth	51.70	541	SN(22)954498
Radnorshire	Builth Wells	42.15	750	SO(32)039530
Brecknockshire	Cwrt-Gwenddwr	43.82	407	SO(32)072456
Radnorshire	Llanbwohllyn, Upper	43.38	1400	SO(32)114475
"	Llanstephan House	41.51	440	SO(32)120420
Brecknockshire	Cathedine	38.67	650	SO(32)145239
"	Llanfillo	35.83	700	SO(32)121324
"	Felin-faoh	36.54	546	SO(32)088333
"	Talgarth	36.42	500	SO(32)136354
"	Glasbury	35.93	276	SO(32)181393
Herefordshire	Clifford	34.28	480	SO(32)268445
"	Tillington	26.09	270	SO(32)467448
"	Burghill	25.73	270	SO(32)482433
Radnorshire	Llangunllo	43.08	776	SO(32)211712
"	Cascob	46.62	1000	SO(32)228658
Herefordshire	Middle Moor	33.43	470	SO(32)326645
Radnorshire	Evancoyd	37.34	744	SO(32)260630
"	Newchurch	38.55	801	SO(32)217508
Herefordshire	Lyonshall, The Croft	31.92	478	SO(32)335558
"	Lyonshall	32.76	510	SO(32)339576

TABLE II Estimated Annual Averages of Rainfall (in inches)
1916-1950 for short-period stations.
(Wye, Usk, Glamorgan and S.W. Wales River Board Areas).
(continued)

County	Station	Annual Average in.	Alt. Ft.	N.G.R.
	Wye River Board (continued)			
Herefordshire	Garnstone	29.17	442	SO(32)401501
"	Monkland	26.99	290	SO(32)449573
"	Hope under Dinmore	26.75	246	SO(32)513538
"	Down House	27.88	485	SO(32)669545
"	Perrystone Court	29.33	520	SO(32)625295
"	Redding's Lodge	33.97	650	SO(32)547135
"	Llanrosser	42.35	1125	SO(32)287380
Monmouthshire	Tre-wyn	40.87	440	SO(32)329228
Herefordshire	Kentchurch Court	32.50	236	SO(32)423258
Monmouthshire	Monmouth, Cornwall House	31.07	52	SO(32)507126
"	Llantilio Crossenny	35.95	530	SO(32)393172
Gloucestershire	Redbrook P. Station	36.93	220	SO(32)539108
Monmouthshire	Chepstow, Bethdour	37.38	310	ST(31)527936
"	Shirenewton Filters	40.68	275	ST(31)484944
"	Sudbrook	32.89	51	ST(31)508874
	Usk River Board			
Carmarthenshire	Upper Usk 6.	77.74	1290	SN(22)812249
"	Upper Usk 5.	68.53	1090	SN(22)815264
"	Upper Usk 3.	55.48	1340	SN(22)799291
"	Upper Usk 1.	56.60	1020	SN(22)829291
"	Upper Usk 2.	55.59	1370	SN(22)808299
Brecknockshire	Blaenau-isaf	65.69	940	SN(22)845258
"	Tairbull	53.55	660	SN(22)996261
"	Brecon Waterworks	45.19	550	SO(32)037276
"	Llanfrynach	48.86	450	SO(32)076258
"	Blaen-caer-fanell	75.27	1584	SO(32)058188
"	Darenfawr	72.73	1172	SO(32)073164
"	Ynysposte	70.05	741	SO(32)072169
"	Ffynonwen	62.50	629	SO(32)091179
"	Talybont Filters	59.28	554	SO(32)105206
"	Graig Pwllfa	77.92	1796	SO(32)071207
"	Nant-y-Llanerch	70.74	1007	SO(32)085212
"	Tyle-Clydach	60.49	709	SO(32)099212
"	Ashford	48.10	390	SO(32)123218
"	Pennyarth	44.37	350	SO(32)187200
"	Gilwern	50.43	575	SO(32)230138
Monmouthshire	Ty-clyd	45.96	272	SO(32)269140
"	Plas Derwen	43.22	200	SO(32)305131
"	Usk	39.67	70	SO(32)368018
"	Pant-yr-Eos Res.	50.39	435	ST(31)294915
Brecknockshire	Llangynidr No. 1.	65.26	1413	SO(32)155139
"	Carno North	64.08	1491	SO(32)159135
Monmouthshire	Blaen-y-Cwm Res.	62.05	1340	SO(32)170130
"	Tredegar	64.42	1028	SO(32)141066
"	Tredegar Laboratory	62.27	950	SO(32)144082
"	Blackwood	54.73	720	ST(31)167973
"	Nantydraenog Res.	56.44	690	ST(31)183934
"	Rogerstone Golf Club	47.50	304	ST(31)268893
"	Newport	40.23	75	ST(31)279849
	Glamorgan River Board			
Monmouthshire	Rhymney Bridge Res.	61.13	1150	SO(32)105110
Glamorgan	Llanishen Res.	41.36	155	ST(31)188815
Brecknockshire	Blaen Taf Fawr	87.61	1675	SN(22)992207
"	Storey Arms Field	85.42	1430	SN(22)986200

TABLE II Estimated Annual Averages of Rainfall (in inches)
1916-1950 for short-period stations.
(Wye, Usk, Glamorgan and S.W. Wales River Board Areas)
(continued)

County	Station	Annual Average in.	Alt. Ft.	N.G.R.
	Glamorgan River Board (continued)			
Brecknockshire	Nant Penig	94.73	2000	SN(22)977191
"	Llysiog	70.08	1080	SO(32)015149
"	Garw-nant	75.73	1100	SN(22)991132
"	Cefn Gougarn	76.01	1362	SN(22)986150
"	Nant Ffynnon	74.88	1352	SN(22)983119
"	Nant Gwinell	69.36	1200	SO(32)017132
"	Garn Ddu	72.28	1340	SO(32)027129
"	Cefn-Coed-y-Cymmer	57.51	790	SO(32)024086
"	Neuadd Res. No. 11A	84.39	1520	SO(32)032185
"	Pentwyn Res. No. 16	69.43	1090	SO(32)049158
Glamorgan	Merthyr Tydfil, Bronygarth	55.26	770	SO(32)047072
"	Dowlais Filters	60.42	1245	SO(32)066096
"	Dowlais	56.69	1075	SO(32)064087
"	Dowlais, Gwernllwyn	54.14	1071	SO(32)071079
"	Penybryn Filters	57.19	937	SO(32)054077
Brecknockshire	Nanthir Res.	61.21	860	SN(22)989068
Glamorgan	Darranlas Res.	64.96	540	ST(31)044991
"	Llanfabon	62.77	600	ST(31)108934
"	Lanwood Res.	62.54	300	ST(31)073908
"	Pontypridd, Grammar School	62.23	330	ST(31)072906
"	Treherbert Park	92.33	600	SS(21)939986
"	Treorchy P. Station	86.65	515	SS(21)965965
"	Lluest Wen Filters	88.45	1200	SN(22)956015
"	Castell Nos Res.	86.90	1060	SN(22)964008
"	Ferndale Park	79.68	860	SS(21)998967
"	Porth Park	73.26	400	ST(31)023911
"	Ty-Gwyn Res.	61.66	725	ST(31)063897
"	Rhubina Res.	50.14	336	ST(31)150824
"	St. Fagans Castle	48.27	100	ST(31)119773
"	Cogan P. Station	41.31	121	ST(31)171729
"	Penarth Cemetery	36.49	99	ST(31)180702
"	Cowbridge, Pwllwy	44.97	92	SS(21)991766
"	Tair Onen	44.22	421	ST(31)038742
"	St. Athan	37.33	50	ST(31)026671
"	Ogmore Vale	86.51	854	SS(21)934936
"	Pontycymmer	81.21	560	SS(21)903916
"	Maesteg Park	72.18	550	SS(21)847913
"	Maesteg, Salisbury Road	65.84	560	SS(21)849910
"	Bridgend, Erw Graig	44.73	50	SS(21)897786
"	Tremains House	44.89	140	SS(21)923796
"	Pentre Meyrick	44.52	300	SS(21)967757
"	Merthyr Mawr, Sohwyll	41.53	45	SS921)888770
"	Porthcawl	38.57	19	SS(21)822771
"	Margam	39.81	24	SS(21)802834
"	Port Talbot	42.85	24	SS(21)789867
"	Aberavon	41.71	57	SS(21)761902
Brecknockshire	Ystradfellte	80.71	1147	SN(22)946171
"	Twyn Gareg	83.00	1501	SN(22)984166
Glamorgan	Llyn Fawr Res. No. 2.	96.00	1220	SN(22)918033
"	Gnoll Res.	52.69	204	SS(21)764975
"	Cimla Res.	52.87	360	SS(21)765963
"	Neath	49.48	145	SS(21)718957

TABLE II Estimated Annual Averages of Rainfall (in inches)
1916-1950 for short-period stations
(Wye, Usk, Glamorgan and S.W. Wales River Board Areas)
(continued)

County	Station	Annual Average in.	Alt. Ft.	N.G.R.
	South West Wales River Board			
Brecknockshire	Nantyrwydd	79.47	908	SN(22)859181
"	Ynyscedwyn	68.37	235	SN(22)778096
Glamorgan	Clydach	54.10	78	SN(22)696014
"	Wernfadog	55.71	400	SN(22)672001
"	Swansea	42.99	32	SS(21)642923
"	Upper Lliw Res.	66.48	599	SN(22)662058
"	Lower Lliw Res.	62.12	416	SN(22)649034
Carmarthenshire	Llannon Res.	63.95	860	SN(22)552102
"	Upper Lliedi	52.33	290	SN(22)514043
"	Llanelli Filters	52.62	237	SN(22)516024
"	Pembrey	42.15	19	SN(22)415022
"	Kidwelly P. Station	50.23	60	SN(22)420087
"	Llyn-y-Fan Fach	108.27	1650	SN(22)799219
"	Waen Sychlwch	106.18	1647	SN(22)803222
"	Troed-y-foel	77.17	867	SN(22)798238
"	Golden Grove Farm	54.23	100	SN(22)597203
"	Carmarthen, Fryn-hir	53.58	155	SN(22)486201
"	Cwmtawel Res.	67.62	300	SN(22)386257
"	Cwmoernant Res.	52.00	135	SN(22)419212
"	Carmarthen, St. Davids Ave.	52.98	100	SN(22)405202
"	Whitland	51.52	60	SN(22)201164
Pembrokeshire	Blackpool	49.64	210	SN(22)058137
"	Haverfordwest	46.43	135	SM(12)955153
"	Milford Haven, Grammar Sch.	38.17	170	SM(12)908060
Cardiganshire	Swyddffynnon	51.58	588	SN(22)696655
"	Llandyssul, Sychpant Horeb	49.15	341	SN(22)406428
"	Llandyssul, Joyous Gard	51.89	390	SN(22)414406
"	Aberporth	41.00	376	SN(22)247516
"	Bwlch-y-Graig	49.22	790	SN(22)580595
"	Trawscoed	47.24	200	SN(22)674736
"	Llygad Rheidol, Lower	88.95	1660	SN(22)791878
"	Nant-y-moch	76.19	1060	SN(22)763871
"	Aberystwyth, Plant Breeding St.	41.61	452	SN(22)605825
"	Aberystwyth	37.55	12	SN(22)580815
"	Gogerddan	40.30	103	SN(22)627836

TABLE III Monthly and Annual Averages of Rainfall, 1916-1950, estimated for short period stations (in inches)
Wye, Usk, Glamorgan and S.W. Wales River Board Areas

Station	County	Jan	Feb	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Llandrindod Wells	Radnorshire	4.55	3.21	2.60	2.64	2.72	2.40	3.17	3.17	3.13	4.26	4.43	4.35	40.63
Abergavenney, Plas Derwen	Monmouthshire	5.10	3.41	3.03	2.85	2.94	2.12	3.03	3.37	3.11	4.45	4.97	4.84	43.22
Usk	"	4.48	2.94	2.66	2.54	2.62	2.06	3.25	3.45	3.25	4.13	4.16	4.13	39.67
Newport	"	4.47	2.90	2.54	2.49	2.66	2.21	3.34	3.74	3.38	4.22	4.14	4.14	40.23
Swansea	Glamorgan	4.73	3.22	2.49	2.41	2.62	2.41	3.48	3.87	3.83	4.69	4.73	4.51	42.99
Haverfordwest	Pembrokeshire	5.29	3.48	3.02	2.42	2.69	2.32	3.72	3.85	3.85	5.11	5.53	5.15	46.43
Aberporth	Cardiganshire	4.63	3.12	2.75	2.38	2.38	2.09	3.16	3.32	3.36	4.67	4.67	4.47	41.00
Trawsooed	"	4.87	3.59	2.84	2.83	2.69	2.88	4.16	4.20	4.06	5.24	5.01	4.87	47.24
Aberystwyth P.B. Sta.	"	3.70	2.91	3.16	2.33	2.37	2.75	3.46	4.29	3.20	4.66	4.20	4.58	41.61
Gogerddan	"	4.03	3.06	2.38	2.30	2.38	2.62	3.50	3.79	3.71	4.51	4.03	3.99	40.30

Table IVa 35-year daily totals of rainfall (in inches), 1916-1950

Cardiff, Penylan

Day	Jan.	Feb.	Mar.	Apr.	May	June	Jly.	Aug	Sep.	Oct.	Nov.	Dec.
1	8.33	5.54	2.59	5.15	3.24	3.42	3.78	5.46	4.18	3.99	7.54	8.42
2	4.28	4.98	2.03	4.00	2.32	1.66	1.56	4.39	5.89	4.09	6.29	5.25
3	3.69	5.27	3.44	4.77	3.22	2.79	2.68	5.16	5.37	5.47	5.34	3.23
4	3.74	3.38	3.62	3.02	3.56	3.33	3.83	3.73	3.29	4.73	5.43	5.47
5	5.96	4.97	4.05	5.77	3.62	3.65	4.07	4.17	2.07	6.28	5.83	6.41
6	6.98	4.50	2.78	2.99	3.04	4.33	6.67	2.37	3.89	4.17	5.08	4.77
7	2.61	4.55	2.69	1.94	3.36	1.92	3.41	3.37	4.72	5.54	3.80	6.18
8	3.67	4.14	2.28	2.42	2.76	1.91	5.27	5.54	2.60	6.04	6.54	5.11
9	5.69	4.25	1.83	3.93	2.60	3.39	3.01	5.66	2.93	5.51	5.46	3.61
10	8.15	3.33	3.07	2.52	4.18	1.55	2.85	3.23	3.07	5.26	2.52	5.55
11	5.72	3.66	2.02	2.82	2.97	2.18	2.57	3.03	2.96	3.73	6.25	3.51
12	7.65	3.87	2.58	1.61	4.25	4.28	2.79	4.17	6.03	4.28	3.85	1.61
13	3.25	1.69	2.58	5.50	.91	1.51	4.57	3.81	4.57	3.56	4.02	5.24
14	5.31	3.13	2.68	3.19	2.26	2.83	4.65	1.76	5.87	3.04	3.77	4.43
15	3.95	3.39	1.78	3.61	2.52	2.44	5.10	2.99	3.64	3.46	5.01	3.62
16	4.17	3.08	4.27	3.45	1.93	2.87	2.65	3.67	4.45	3.81	6.48	3.41
17	5.36	3.72	3.38	1.82	3.01	2.54	5.97	3.86	5.25	6.50	4.49	2.24
18	7.03	2.34	3.27	2.14	3.24	3.65	3.79	3.53	5.70	4.94	7.01	3.88
19	4.21	3.24	4.02	3.25	1.57	2.42	5.07	5.30	7.68	5.85	7.23	3.42
20	3.79	2.80	2.25	2.51	2.72	2.49	5.72	7.24	3.58	5.78	4.15	2.32
21	4.34	3.09	2.76	2.80	2.72	1.50	3.36	5.32	6.16	6.35	6.37	4.25
22	6.29	3.21	2.99	1.60	2.47	2.25	3.55	4.93	6.76	7.77	5.79	6.53
23	3.67	3.28	2.00	2.92	4.69	2.10	2.19	5.41	3.09	7.22	5.26	3.53
24	6.51	3.91	2.22	2.83	3.24	1.44	2.50	3.40	3.61	7.70	3.42	3.68
25	3.62	5.72	2.69	3.63	4.05	2.79	3.68	3.74	1.74	6.53	3.69	5.44
26	4.71	3.62	1.77	1.31	5.19	1.52	6.72	3.73	2.43	4.61	4.25	6.80
27	3.33	3.27	2.94	2.16	8.45	3.88	4.48	6.80	2.77	4.51	5.25	7.70
28	8.50	3.01	3.26	1.98	2.41	2.59	3.86	5.33	1.75	2.47	3.81	7.09
29	4.39	1.02	3.80	2.17	4.80	3.90	4.14	5.18	3.03	5.93	4.45	6.99
30	4.97	-	2.01	2.31	3.99	3.31	3.63	7.21	5.06	4.41	5.78	6.75
31	7.24	-	5.37	-	3.99	-	2.91	4.02	-	5.64	-	6.07

Table IVa 35-year daily totals of rainfall (in inches), 1916-1950

Treherbert

Day	Jan.	Feb.	Mar.	Apr.	May	June	Jly.	Aug.	Sep.	Oct.	Nov.	Dec.
1	20.06	17.08	6.24	9.98	4.76	8.93	10.22	10.07	9.87	9.00	16.10	17.78
2	15.16	16.10	5.65	6.48	2.24	5.50	4.32	8.11	12.14	8.61	16.97	15.20
3	11.00	14.29	8.42	7.13	5.21	4.84	6.93	6.30	14.36	11.82	13.46	10.13
4	10.67	8.71	7.59	8.73	7.74	8.81	11.53	8.91	8.09	9.93	14.15	12.83
5	13.62	12.63	7.47	10.45	6.27	7.09	8.82	9.32	5.78	13.10	12.23	7.90
6	16.06	11.14	6.36	6.39	6.67	7.97	9.52	4.36	7.29	11.89	11.12	12.42
7	11.66	14.76	5.05	4.60	5.60	2.60	7.40	7.27	9.23	11.41	8.19	14.72
8	10.24	13.05	2.91	6.19	4.14	4.69	8.96	7.98	4.47	12.39	9.92	8.90
9	16.28	13.96	2.68	7.39	4.30	7.97	5.02	8.65	4.26	16.54	10.42	10.43
10	18.76	9.64	6.93	5.78	7.31	3.87	8.99	8.29	6.99	14.75	7.98	16.81
11	14.79	6.52	4.31	5.84	5.92	3.58	6.42	8.28	4.18	7.88	17.94	7.68
12	22.96	10.26	6.72	4.49	8.56	5.68	6.31	10.56	10.60	9.24	12.08	4.86
13	11.31	3.61	5.14	12.86	3.86	2.64	9.45	9.04	9.47	9.70	10.62	16.19
14	15.11	6.68	5.81	8.81	4.56	5.43	4.56	6.66	10.75	6.62	12.09	12.39
15	8.56	12.10	5.46	6.96	5.51	5.78	9.80	7.81	6.64	10.75	8.18	11.73
16	10.45	8.14	11.13	7.04	3.56	5.96	6.20	9.10	12.85	8.04	12.89	7.83
17	13.79	7.41	7.51	3.49	7.40	4.90	10.18	9.76	12.80	11.79	7.56	7.73
18	13.56	4.78	10.12	3.91	4.89	9.46	8.82	6.99	8.64	10.26	17.24	10.67
19	9.52	7.39	8.91	6.99	3.87	6.15	7.85	9.65	15.81	13.50	19.05	6.47
20	9.49	7.05	5.05	5.25	4.39	4.70	7.86	13.21	9.77	13.30	11.92	9.42
21	10.66	7.08	6.85	4.08	2.81	3.29	6.82	10.91	7.93	13.02	11.94	12.00
22	13.85	10.73	6.60	3.91	5.32	5.28	9.43	9.10	14.09	13.09	14.89	13.82
23	9.77	8.15	6.03	8.20	6.46	3.70	7.21	10.18	6.86	12.46	18.45	8.31
24	13.49	7.54	5.00	6.79	6.13	4.15	7.31	8.00	9.55	13.62	8.80	11.43
25	11.70	12.18	6.53	6.16	6.72	5.33	6.87	10.10	5.63	15.15	12.05	12.54
26	9.98	10.52	4.03	4.11	6.82	3.76	8.91	6.78	6.07	9.02	7.91	16.28
27	7.92	11.55	6.25	3.56	9.27	6.43	8.60	10.66	5.78	9.02	13.14	12.84
28	15.42	6.14	6.63	3.60	3.52	5.81	10.40	8.80	3.81	6.19	7.43	17.94
29	11.19	1.11	9.87	4.90	8.77	7.54	7.49	10.13	5.80	12.95	10.58	16.56
30	9.04	-	4.56	3.72	6.03	8.43	8.63	7.83	9.52	11.03	11.65	15.28
31	18.42	-	12.36	-	5.64	-	6.21	5.51	-	10.34	-	12.84

Table IVa 35-year daily totals of rainfall (in inches), 1916-1950

Beacons Res.

Day	Jan.	Feb.	Mar.	Apr.	May	June	Jly.	Aug.	Sep.	Oct.	Nov.	Dec.
1	16.39	15.93	5.77	9.12	5.83	8.00	8.28	10.12	8.84	6.54	13.92	14.68
2	10.47	10.92	4.75	6.03	3.26	5.22	5.15	5.85	8.50	6.30	17.47	13.70
3	9.79	12.59	6.30	7.22	3.59	4.25	7.56	5.19	12.14	10.60	12.91	8.54
4	8.20	7.99	6.40	8.43	6.24	7.98	9.67	6.58	7.17	9.36	10.59	12.07
5	12.16	10.10	8.39	7.67	7.22	7.38	7.32	7.93	4.71	15.63	10.66	6.98
6	13.16	8.54	6.43	6.19	4.99	6.45	8.95	5.35	6.71	10.75	9.84	10 73
7	11.04	11.28	5.39	4.82	4.72	4.62	4.19	7.14	8.08	9.45	6.99	10.98
8	8.89	10.52	3.31	6.20	3.73	5.01	7.06	8.77	5.31	11.55	9.98	8.72
9	13.73	13.85	2.70	7.49	3.69	7.74	5.31	8.76	3.48	15.62	10.36	8.41
10	17.22	7.41	5.16	4.90	5.85	4.35	7.07	8.79	4.93	11.69	7.60	13.70
11	12.77	6.09	3.58	4.29	5.35	3.34	6.09	6.42	3.57	6.83	15.83	6.64
12	16.35	9.67	7.03	4.17	7.36	4.89	8.82	11.18	11.61	7.78	11.13	4.31
13	10.15	2.79	4.66	10.88	2.94	3.47	6.66	7.10	8.13	8.99	8.37	11.99
14	12.70	6.01	4.48	7.72	5.08	5.17	4.27	4.31	12.34	6.83	11.62	11.86
15	7.33	10.06	5.16	6.10	5.86	5.49	10.45	7.83	6.43	6.59	7.44	9.78
16	10.18	6.90	9.12	7.84	3.85	6.15	5.78	6.97	11.68	5.93	11.18	7.20
17	12.58	5.96	7.43	4.15	6.14	6.15	10.78	8.47	10.10	11.33	7.07	7.36
18	11.65	4.42	9.46	4.98	4.10	8.05	7.35	7.43	10.51	9.07	14.46	9.58
19	8.65	6.68	7.96	5.87	4.92	6.39	6.89	6.92	11.59	10.09	16.04	5.61
20	9.27	6.23	4.88	5.41	4.63	4.41	6.98	9.81	10.77	12.06	11.84	6.48
21	11.26	6.65	5.42	4.32	2.88	3.92	6.55	11.42	8.62	11.67	11.14	8.36
22	12.01	9.87	6.71	3.25	5.57	3.63	8.72	10.68	10.71	11.19	11.61	12.00
23	8.86	5.35	5.69	6.80	6.32	3.54	7.49	8.82	6.09	11.83	13.91	7.29
24	10.98	6.04	3.90	5.93	5.38	3.71	5.05	7.85	7.78	13.18	7.49	10.91
25	9.02	8.49	4.24	6.34	5.98	4.97	6.61	6.31	7.16	15.74	10.05	9.55
26	8.59	9.78	3.83	3.86	7.75	4.45	9.21	7.00	4.83	8.79	8.39	14.73
27	7.25	10.60	6.16	4.48	10.18	6.57	8.90	10.25	6.17	9.54	10.79	11.74
28	12.60	6.63	5.42	4.60	3.76	6.60	8.67	8.53	4.22	4.97	6.47	15.42
29	9.49	1.44	8.06	5.19	7.29	8.34	7.66	9.20	4.69	11.92	8.14	14.02
30	8.00	-	4.99	4.81	4.62	7.42	8.64	4.13	8.03	9.60	9.81	14.09
31	15.94	-	9.66	-	7.12	-	5.71	5.31	-	10.46	-	11.23

Table IVa 35-year daily totals of rainfall (in inches), 1916-1950

Penterynfe

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	10.83	9.77	4.88	5.39	4.30	6.53	4.83	6.77	6.47	4.68	11.91	10.95
2	7.81	7.76	2.57	4.16	2.35	2.64	4.32	3.98	5.36	5.12	9.20	8.98
3	6.19	9.07	4.10	4.10	3.34	2.88	5.12	3.11	7.68	8.19	9.22	5.41
4	6.17	4.56	5.55	6.66	4.91	4.91	5.19	4.69	3.21	6.56	9.95	8.10
5	9.79	5.45	5.55	5.44	5.96	3.79	5.52	7.57	3.13	7.89	7.70	5.26
6	7.85	6.85	4.24	3.00	4.20	5.30	5.79	3.23	4.45	7.06	6.58	8.35
7	6.22	6.76	2.66	3.44	4.52	2.96	3.56	5.77	5.37	9.22	4.70	8.58
8	7.59	7.08	1.66	3.78	1.75	2.47	5.33	4.84	3.94	7.06	6.76	7.69
9	7.59	8.29	1.40	4.68	3.99	5.89	3.19	6.52	2.67	9.38	6.83	7.13
10	11.07	3.59	4.40	4.32	2.74	2.36	4.41	5.38	2.75	8.91	5.21	11.03
11	9.48	4.58	4.05	4.05	3.11	2.48	4.17	5.20	2.90	4.39	10.39	4.62
12	13.94	6.52	4.20	2.15	6.21	4.50	4.73	5.44	7.77	4.74	7.80	3.81
13	5.96	2.08	3.68	7.95	2.70	2.43	5.07	4.02	6.10	5.90	8.57	9.35
14	9.18	3.83	3.57	6.15	2.42	2.53	3.83	2.90	7.98	5.11	8.30	7.80
15	7.79	5.18	3.48	4.54	4.70	3.03	7.08	4.98	3.77	5.95	5.70	8.80
16	6.75	4.36	6.49	4.18	3.23	3.25	5.85	4.78	9.48	5.06	7.71	5.81
17	7.68	5.27	5.21	2.47	5.98	3.85	7.30	6.28	6.80	8.36	4.55	6.05
18	7.37	3.38	6.97	2.74	3.18	4.71	6.22	4.89	7.20	5.39	10.40	6.45
19	4.81	4.13	5.97	4.78	3.26	3.71	4.26	5.57	8.35	9.12	11.04	3.44
20	6.97	4.52	3.47	3.66	3.74	5.34	5.46	7.01	5.81	8.85	7.40	5.85
21	7.16	5.09	3.55	2.83	1.73	2.33	4.32	10.55	5.69	9.35	7.98	5.34
22	7.46	7.22	3.79	3.04	4.48	2.77	5.15	6.75	6.31	8.61	7.27	8.00
23	5.69	4.59	3.45	4.22	5.20	2.10	4.61	6.22	4.27	8.33	10.02	6.68
24	8.04	4.80	3.22	4.61	4.41	1.95	3.54	4.60	4.22	9.33	5.24	7.50
25	7.39	7.16	4.12	4.35	3.63	3.15	4.81	5.53	4.08	9.86	8.71	6.71
26	7.35	6.76	2.75	2.19	6.80	3.04	4.59	4.77	3.36	7.41	5.45	9.33
27	5.85	5.90	4.54	1.98	5.90	3.69	5.42	8.07	4.35	6.12	8.46	7.87
28	8.53	5.57	4.69	2.48	2.67	4.94	6.40	6.53	3.54	4.35	4.39	9.25
29	5.75	86	5.27	3.07	5.13	4.47	4.24	5.75	3.39	7.78	5.53	11.49
30	5.93	-	4.46	2.61	3.68	5.66	4.06	4.47	5.73	7.79	6.51	10.39
31	9.23	-	6.65	-	4.17	-	3.90	4.21	-	6.49	-	7.20

Table IVa 35-year daily totals of rainfall (in inches), 1916-1950

Newbridge

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	8.60	7.08	3.10	5.02	2.93	4.46	3.37	2.90	6.58	3.70	6.70	7.27
2	4.91	6.03	1.85	3.72	2.20	2.86	2.27	2.86	4.17	4.08	7.43	6.81
3	4.76	5.73	3.31	3.49	2.64	3.36	3.49	2.53	4.77	6.41	6.25	4.95
4	3.70	2.90	3.30	3.70	3.84	2.51	4.21	3.24	2.95	4.55	5.75	6.89
5	6.96	4.78	4.52	4.46	4.45	3.68	5.46	4.04	2.81	7.32	5.55	4.45
6	6.06	4.79	4.49	3.50	3.06	2.63	3.69	2.83	2.99	5.73	5.79	6.09
7	4.23	5.68	2.36	3.71	3.23	3.13	3.09	3.77	4.23	7.34	4.39	6.45
8	5.05	5.25	2.29	4.08	2.54	2.39	4.50	3.90	3.12	6.51	6.18	5.07
9	7.41	7.05	1.59	5.07	2.30	4.53	2.92	5.02	2.58	5.75	5.69	4.79
10	8.51	3.34	2.53	3.16	2.88	2.28	4.04	4.16	2.34	6.41	4.00	5.83
11	6.72	3.80	3.29	2.95	3.15	2.61	3.54	3.85	1.58	4.43	7.47	2.78
12	8.33	4.56	2.98	1.70	3.75	4.84	3.47	4.18	7.73	3.04	5.32	2.47
13	4.93	1.58	1.94	5.68	1.45	2.15	4.27	4.06	4.25	4.48	5.90	5.44
14	7.02	2.92	2.85	3.70	2.83	3.68	2.74	2.67	4.97	3.40	5.41	5.59
15	4.65	5.06	3.03	3.84	3.96	1.48	6.02	2.52	2.74	3.87	3.50	5.31
16	4.80	2.76	3.86	4.30	2.93	2.16	3.36	3.65	4.16	3.65	7.19	4.63
17	6.78	4.25	3.48	3.30	4.27	3.36	5.26	4.48	5.08	5.25	4.22	3.90
18	7.08	3.71	4.39	2.56	2.40	4.68	6.77	3.50	5.01	4.80	7.31	4.15
19	3.68	2.56	4.25	1.88	3.05	2.73	3.31	4.86	6.41	5.53	7.08	3.67
20	4.07	3.17	2.30	2.63	2.90	3.59	4.69	5.06	5.74	5.16	5.00	2.45
21	5.79	3.22	2.90	3.04	1.84	2.93	2.80	5.02	3.88	6.04	7.00	3.37
22	5.63	5.39	3.70	1.77	3.92	2.00	4.88	4.52	5.60	5.03	6.68	5.75
23	3.95	1.84	2.93	2.96	3.95	2.32	3.02	3.93	3.52	6.31	6.67	4.85
24	4.90	3.68	2.21	3.09	4.49	2.48	2.09	3.88	4.53	7.33	4.35	4.60
25	6.07	4.38	2.39	4.07	3.33	2.88	3.83	3.46	3.13	6.49	6.65	6.06
26	4.84	6.81	2.53	2.38	5.75	3.03	3.91	5.15	2.36	6.72	4.49	6.92
27	3.24	5.87	3.67	1.97	6.50	3.03	4.13	5.65	3.97	5.09	5.43	5.63
28	6.67	4.47	4.39	2.75	2.64	3.80	4.36	5.33	2.10	2.76	3.22	7.80
29	5.01	.53	3.78	2.97	3.77	3.65	4.71	4.67	2.73	6.97	3.34	7.68
30	4.76	-	3.17	2.33	2.49	3.87	2.49	3.12	3.83	4.26	5.08	8.70
31	7.01	-	3.46	-	4.03	-	2.69	2.63	-	5.80	-	5.78

Table IVb Rainfall totals in inches, divided by 35, thus giving 35-year means ranging from 'trace' to .70 in., for use with table IVa.

Totals in inches x	35 yr means $x/35$	Totals in inches x	35 yr means $x/35$
- .17	'trace'	12.43 - 12.77	.36
.18 - .52	.01	12.78 - 13.12	.37
.53 - .87	.02	13.13 - 13.47	.38
.88 - 1.22	.03	13.48 - 13.82	.39
1.23 - 1.57	.04	13.83 - 14.17	.40
1.58 - 1.92	.05	14.18 - 14.52	.41
1.93 - 2.27	.06	14.53 - 14.87	.42
2.28 - 2.62	.07	14.88 - 15.22	.43
2.63 - 2.97	.08	15.23 - 15.57	.44
2.98 - 3.32	.09	15.58 - 15.92	.45
3.33 - 3.67	.10	15.93 - 16.27	.46
3.68 - 4.02	.11	16.28 - 16.62	.47
4.03 - 4.37	.12	16.63 - 16.97	.48
4.38 - 4.72	.13	16.98 - 17.32	.49
4.73 - 5.07	.14	17.33 - 17.67	.50
5.08 - 5.42	.15	17.68 - 18.02	.51
5.43 - 5.77	.16	18.03 - 18.37	.52
5.78 - 6.12	.17	18.38 - 18.72	.53
6.13 - 6.47	.18	18.73 - 19.07	.54
6.48 - 6.82	.19	19.08 - 19.42	.55
6.83 - 7.17	.20	19.43 - 19.77	.56
7.18 - 8.52	.21	19.78 - 20.12	.57
7.53 - 7.87	.22	20.13 - 20.47	.58
7.88 - 8.22	.23	20.48 - 20.82	.59
8.23 - 8.57	.24	20.83 - 21.17	.60
8.58 - 8.92	.25	21.18 - 21.52	.61
8.93 - 9.27	.26	21.53 - 21.87	.62
9.28 - 9.62	.27	21.88 - 22.22	.63
9.63 - 9.97	.28	22.23 - 22.57	.64
9.98 - 10.32	.29	22.58 - 22.92	.65
10.33 - 10.67	.30	22.93 - 23.27	.66
10.68 - 11.02	.31	23.28 - 23.62	.67
11.03 - 11.37	.32	23.63 - 23.97	.68
11.38 - 11.72	.33	23.98 - 24.32	.69
11.73 - 12.07	.34	24.33 - 24.67	.70
12.08 - 12.42	.35		

Table V Accumulated Frequencies of Daily Rainfall (in inches), 1916-1950

Cardiff

Daily totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
IV 4.10					1								1
2.50					1								1
2.40					1						1		2
2.30					1				1	1	1		4
2.20					1			1	1	1	1		5
2.10					1		1	1	1	2	1		7
2.00	1				1		1	1	1	2	1		8
1.90	1				1		1	2	1	2	1		9
1.80	1				1		1	4	1	2	1		11
1.70	3				1		1	4	2	2	2		15
1.60	3				1		1	4	3	5	3	1	21
1.50	4				1		2	5	4	5	4	2	27
1.40	4				3		2	6	5	10	9	2	41
1.30	5	1		1	5		8	7	8	13	11	5	64
1.20	9	1	1	2	7	3	11	7	11	15	13	6	86
1.10	15	2	1	3	7	5	15	13	17	20	17	10	125
1.00	16	5	1	4	11	8	21	19	22	23	19	12	161
0.90	27	9	3	5	16	10	25	27	31	29	28	18	228
0.80	33	12	7	7	22	13	31	33	37	39	35	30	299
0.70	49	25	14	12	29	18	41	44	46	53	55	53	439
0.60	66	44	26	23	39	28	51	65	62	70	72	68	614
0.50	92	59	52	36	51	38	70	89	73	101	96	97	854
0.40	137	83	72	71	73	56	98	122	97	141	122	133	1205
0.30	193	129	108	107	106	91	127	158	140	188	181	192	1720
0.20	285	191	161	164	166	144	187	214	1 3	266	252	271	2494
0.10	408	297	254	270	273	223	304	330	287	369	370	376	3761
IV 0.005	655	501	480	487	485	427	509	537	494	583	599	611	6368
VI *0.004	430	488	605	563	600	623	576	548	556	502	451	474	6416
Total No. of days	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

*Including rainless days.

Table V Accumulated Frequencies of Daily Rainfall (in inches), 1916-1950

Treherbert

Daily Totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
≥ 5.60											1		1
5.30											2		2
5.20											3		3
4.60											4		4
4.00										1	6		7
3.80									1	1	7		9
3.70									1	2	8		11
3.60							1		1	2	9		13
3.50							1		1	2	10		14
3.40	1						1		1	2	10		15
3.30	3						1	2	1	2	10	1	20
3.20	4	1					1	2	1	3	10	3	25
3.10	5	2				1	1	2	1	4	10	3	29
3.00	7	3			1	1	1	2	1	5	11	7	39
2.90	7	5	1		1	1	2	2	1	6	11	7	44
2.80	8	5	1	1	1	1	2	3	3	8	14	8	55
2.70	9	5	1	1	2	1	2	4	3	8	14	8	58
2.60	11	5	1	1	2	1	3	5	5	9	16	10	69
2.50	14	6	2	1	2	1	4	5	5	11	17	10	78
2.40	16	9	2	2	3	3	4	6	5	12	18	13	93
2.30	21	10	2	2	3	3	5	7	8	16	19	14	110
2.20	21	10	4	4	3	4	5	7	9	20	24	19	130
2.10	25	13	6	4	4	5	8	9	10	21	27	23	155
2.00	26	16	6	6	4	8	10	9	11	24	29	24	173
1.90	28	21	7	7	5	8	11	12	14	28	29	30	200
1.80	32	24	8	7	8	8	12	15	16	36	33	35	234
1.70	39	32	11	8	9	9	17	18	20	40	39	39	281
1.60	49	38	15	9	11	11	21	26	24	45	49	43	341
1.50	54	42	20	9	16	12	21	27	32	52	54	55	394
1.40	66	48	26	11	20	17	27	33	40	63	63	59	473
1.30	76	56	32	13	24	19	35	41	46	66	73	70	551
1.20	94	64	36	18	28	22	42	53	58	78	85	81	659
1.10	114	72	42	26	30	26	50	64	66	92	98	99	779
1.00	131	84	49	35	38	34	62	73	76	111	109	118	920
0.90	149	101	62	46	44	42	77	91	85	129	125	137	1088
0.80	177	125	82	70	56	60	100	110	102	157	152	163	1354
0.70	205	147	94	87	70	79	125	130	121	184	186	192	1618
0.60	242	169	116	105	88	98	143	169	154	211	214	229	1938
0.50	282	193	139	131	107	121	179	202	186	241	243	262	2286
0.40	340	221	167	153	150	149	213	232	225	279	274	318	2727
0.30	407	263	215	209	189	189	253	275	265	324	324	367	3280
0.20	478	337	279	278	249	233	326	336	329	404	391	433	4073
0.10	573	421	370	389	355	320	434	442	414	485	501	531	5240
≥ 0.005	793	610	589	594	558	537	638	631	606	675	716	752	7699
≥ *0.004	292	379	496	456	527	513	447	454	444	410	334	333	5085
Total No. of days	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

*Including raileas days.

Table V Accumulated Frequencies of Daily Rainfall (in inches), 1916-1950

Beacons Res.

Daily totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
IV 4.90											1		1
4.70										1	1		2
4.60										1	2		3
4.40										1	3		4
3.70									1	1	4		6
3.40				1					1	1	4		7
3.30				1					1	2	4		8
3.10				1					1	3	4		9
3.00	2			1					2	3	6		14
2.90	3			1					2	5	6	1	18
2.80	4			1					2	5	6	1	19
2.70	4			1					2	5	9	1	22
2.60	4			1					2	7	9	2	25
2.50	6	2	1	1			2		2	7	10	4	35
2.40	7	2	1	1			2	1	2	8	11	5	40
2.30	8	3	1	2			3	1	2	9	12	6	47
2.20	9	5	1	2	1	1	3	3	2	10	14	8	59
2.10	11	6	1	2	2	2	4	5	4	15	17	9	78
2.00	15	9	2	2	2	4	4	5	7	17	18	11	96
1.90	17	10	3	2	4	6	4	6	12	18	18	11	111
1.80	18	11	3	4	5	6	7	10	16	22	23	14	139
1.70	22	16	3	6	5	7	9	15	17	25	27	21	173
1.60	25	20	3	6	7	9	13	18	17	26	29	22	195
1.50	32	25	8	6	8	9	17	19	25	34	40	31	254
1.40	39	32	12	7	9	10	23	23	30	41	45	34	305
1.30	54	40	15	11	12	14	26	28	33	52	55	43	383
1.20	64	46	18	15	19	20	33	40	37	60	63	55	470
1.10	76	56	22	17	23	30	46	49	45	76	76	68	584
1.00	90	62	35	25	31	34	56	60	50	86	89	84	702
0.90	109	75	47	36	37	44	64	71	63	107	103	101	857
0.80	137	83	67	50	50	51	79	87	84	129	127	125	1069
0.70	169	105	81	67	66	69	99	109	97	158	151	157	1328
0.60	208	128	97	84	82	95	119	133	125	186	186	194	1637
0.50	249	163	123	115	101	112	160	162	173	223	230	237	2048
0.40	306	204	155	152	132	146	202	204	206	270	272	288	2537
0.30	389	259	200	205	182	191	250	263	267	326	318	351	3201
0.20	475	324	283	292	259	246	326	349	320	386	386	439	4085
0.10	582	440	395	411	380	336	447	456	428	497	515	549	5436
IV 0.005	797	628	588	623	584	550	666	671	635	690	719	781	7932
VI *0.004	288	361	497	427	501	500	419	414	415	395	331	304	4852
Total No. of days	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

Table V Accumulated Frequencies of Daily Rainfall (in inches), 1916-1950

Pontcrynfe

Daily totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
IV 3.90											1		1
2.60										1	1		2
2.50		1								1	1		3
2.40		2					1			1	2	2	8
2.30		2			1		1			1	3	2	10
2.20		2			2		1	1		1	5	2	14
2.10		2			2		1	1		1	7	3	17
2.00	2	3			2		1	1	1	2	7	3	22
1.90	4	3			2		1	1	1	4	8	6	30
1.80	6	3			2	1	3	1	2	5	11	7	41
1.70	8	3	1		2	1	5	1	2	5	12	10	50
1.60	10	4	2	1	3	1	5	2	3	5	13	13	62
1.50	15	6	4	1	4	1	6	7	5	9	17	14	89
1.40	19	8	5	3	7	3	9	11	9	15	19	15	123
1.30	24	11	7	4	9	3	9	14	9	19	26	20	155
1.20	27	15	10	6	10	5	10	19	13	28	32	25	200
1.10	33	23	12	8	11	8	16	21	19	38	41	33	263
1.00	45	33	16	14	16	13	19	30	24	44	54	42	350
0.90	58	38	23	16	25	21	28	40	30	61	67	54	461
0.80	76	44	35	20	32	24	34	47	42	75	82	81	592
0.70	97	65	47	30	38	31	48	68	54	96	96	107	777
0.60	131	89	62	46	48	42	75	84	78	131	125	135	1046
0.50	173	108	80	62	67	65	91	105	97	166	154	169	1337
0.40	214	134	100	95	95	90	133	141	133	210	201	196	1742
0.30	280	172	143	128	134	135	181	196	178	256	241	259	2303
0.20	357	245	212	190	197	186	241	272	241	327	321	344	3133
0.10	497	348	314	336	321	277	354	376	365	434	435	478	4535
IV 0.005	775	572	559	578	554	521	610	617	605	676	711	749	7527
VI 0.004	310	417	526	472	531	529	475	468	445	409	339	336	5257
Total No. of days	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

Table V Accumulated Frequencies of Daily Rainfall (in inches), 1916-1950

Newbridge

Daily totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
IV 3.50							1						1
2.50							1						1
2.40							1						1
2.30							1				1		2
2.20					1		1				2		4
2.10					1		1				3		5
2.00					1		1				3		5
1.90	1				2		1			1	4		9
1.80	3	1			2		1			2	5		14
1.70	3	1			3		2	2		2	5	1	19
1.60	3	2			3		3	2	2	2	5	1	23
1.50	4	3			3		3	2	3	2	6	1	27
1.40	5	3	1		3	1	3	3	3	4	7	2	35
1.30	5	4	1		3	1	3	4	4	4	8	2	39
1.20	6	5	2		4	1	4	4	5	9	11	4	55
1.10	8	7	2	1	5	2	7	4	7	13	14	8	78
1.00	15	9	3	3	5	4	10	5	8	22	18	11	113
0.90	19	13	7	5	10	6	13	9	10	28	25	18	163
0.80	37	23	9	12	14	11	22	12	20	40	34	27	261
0.70	51	36	17	16	23	21	32	27	32	55	46	44	400
0.60	72	53	22	25	37	28	46	41	46	71	70	66	577
0.50	102	72	34	35	53	39	63	57	62	95	95	96	803
0.40	142	100	57	67	70	68	90	94	90	130	143	144	1195
0.30	208	159	111	100	112	111	131	136	132	194	206	197	1777
0.20	307	199	176	167	161	171	199	215	200	285	295	296	2671
0.10	454	334	302	323	288	266	313	339	325	410	416	445	4215
III 0.005	768	576	566	570	545	492	582	603	596	659	694	725	7376
VI *0.004	317	413	519	480	540	558	503	482	454	426	356	360	5408
Total No. of days	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

* Including rainless days.

TABLE VI. Maximum and Minimum Monthly and Annual Totals of Rainfall (in inches), 1916-1950, with supplementary list covering the extremes for the 50-year period, 1911-1950.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Cardiff	Max	1928 9.07	1923 8.50	1947 7.57	1920 5.66	1931 8.04	1935 4.98	1937 8.41	1917 9.43	1918 10.49	1916 9.04	1929 11.14	1934 11.17	1927 51.17
1916-50	Min	1935 0.84	1932 0.03	1925 0.42	1938 0.17	1919 0.71	1921 0.05	1935 0.66	1940 0.20	1929 0.59	1931 1.04	1933 0.78	1926 0.27	1921 25.94
Other Extremes 1911-60	Max						1912 6.94							1960 55.29
	Min							1911 0.13		1959 0.25				
Treherbert	Max	1928 22.16	1923 20.75	1947 16.47	1920 14.00	1942 11.94	1948 10.58	1939 17.71	1917 17.69	1918 17.64	1916 19.80	1929 27.11	1929 24.05	1946 114.98
1916-50	Min	1935 2.66	1932 0.17	1944 0.82	1938 0.52	1928 0.67	1925 0.41	1919 1.60	1947 0.94	1941 0.66	1947 2.55	1942 1.54	1926 0.53	1917 72.24
Other Extremes 1911-60	Max			1912 16.97	1913 15.27		1954 10.63				1954 20.64		1911 24.23	
	Min							1911 0.56			1951 2.11			
Beacons Res.	Max	1948 19.40	1923 16.62	1947 13.84	1920 13.36	1942 9.50	1946 10.29	1939 16.13	1917 17.04	1946 13.94	1916 17.77	1929 20.59	1929 20.31	1946 105.24
1916-50	Min	1935 2.67	1921 0.24	1944 0.71	1938 0.37	1928 1.17	1925 0.02	1935 1.71	1947 0.79	1941 1.27	1946 1.67	1945 0.98	1926 1.01	1933 57.91
Other Extremes 1911-60	Max									1958 14.21	1954 18.78	1960 20.68	1959 21.29	1960 110.51
	Min	1953 2.47						1911 0.57		1959 0.83				

TABLE VI. Maximum and Minimum Monthly and Annual Totals of Rainfall (in inches), 1916, with supplementary list covering the extremes for the 50-year period, 1911-60.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Pontcrynfe*	Max	1930 13.86	1925 11.03	1947 12.20	1920 9.23	1942 9.54	1928 7.08	1939 10.66	1917 11.43	1950 10.11	1916 12.64	1929 17.56	1929 16.92	1948 73.16
1916-50	Min	1935 1.55	1921 0.15	1944 0.54	1938 0.30	1928 0.48	1925 0.00	1934 0.85	1947 0.44	1941 0.59	1947 1.54	1945 0.94	1926 0.69	1933 41.90
Other Extremes 1911-60	Max		1915 11.66							1958 11.07				1954 76.24
	Min									1959 0.54	1951 1.29			1911 32.87
Newbridge	Max	1948 11.42	1923 8.27	1947 7.62	1920 6.82	1931 5.80	1927 6.20	1939 8.02	1917 8.82	1918 8.77	1916 9.22	1940 11.26	1929 10.91	1946 53.94
1916-50	Min	1929 1.35	1932 0.12	1929 0.36	1938 0.21	1919 0.65	1925 0.44	1935 0.45	1940 0.39	1939 0.79	1947 0.73	1942 0.76	1933 1.22	1921 31.89
Other Extremes 1911-60	Max			1912 7.70										1912 54.59
	Min	1953 1.28			1957 0.18				1959 0.36	1959 0.23				

* Terminated March, 1960.

Table VII Maximum Daily Rainfall (in inches), 1916-50, with additional maxima for the 50-year period 1911-60.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Cardiff	1916-50 Max	1945 2.00	1925 1.30	1947 1.20	1935 1.31	1931 4.18	1925 1.28	1940 2.16	1929 2.23	1944 2.33	1929 2.32	1927 2.47	1922 1.60
	1911-60 Max			1954 1.34	1913 1.62		1955 1.68						1960 2.27
Treherbert	1916-50 Max	1937 3.41	1937 3.27	1947 2.93	1945 2.88	1949 3.02	1932 3.15	1939 3.68	1929 3.36	1944 3.85	1933 4.00	1946 5.66	1942 3.31
	1911-60 Max	1957 3.95	1915 3.51		1913 4.45								1960 5.93
Beacons Res.	1916-50 Max	1932 3.02	1928 2.58	1947 2.51	1945 3.45	1931 2.25	1939 2.28	1939 2.58	1929 2.42	1944 3.72	1941 4.76	1931 4.98	1942 2.97
	1911-60 Max			1953 3.20					1954 3.12				
Pontcrynfe*	1916-50 Max	1932 2.06	1916 2.54	1919 1.78	1945 1.69	1943 2.37	1932 1.80	1926 2.43	1927 2.20	1944 2.01	1933 2.63	1931 3.98	1936 2.47
	1911-60 Max			1953 1.93	1913 2.05	1954 2.43	1915 3.03				1959 2.98		
Newbridge	1916-50 Max	1948 1.98	1946 1.80	1919 1.45	1945 1.11	1916 2.25	1935 1.45	1926 3.50	1926 1949 1.79	1948 1.68	1933 1.90	1931 2.35	1948 1.78
	1911-60 Max			1955 1.93	1913 1960 1.18		1953 1.54		1911 2.40				1960 2.72

* Data missing for 1960 which could surpass the maximum during the standard period (1916-50). i.e. in December

Appendix I

River Board Areas of South Wales, Glamorgan, Wye and Usk.

Intense falls of Rain in 2 hours or less, 1860-1960
Extracted from British Rainfall

(Arranged chronologically under county headings).

Year	Class	Station	Riv. Div.	Date	Amt in.	D'r'n min.	Rate in/hr
Pembrokeshire							
1882	N	Solva	3	July 6	.67	15	2.68
1902	N	Pembroke Dock, County Sch.	4	Sep. 23	1.00	60	1.00
1906	N	Haverfordwest, High St.	4	Aug. 2	1.37	90	.91
1953	R	Pembroke Dock	4	June 27	2.07	65	1.91
Carmarthenshire							
1899	R	Llandovery, Town	2	Aug. 7	1.21	30	2.42
"	R	Llandwrda, Dolaucothy	2	Aug. 7	2.08	90	1.39
1911	R	Llandilo, Caeglas	2	May 13	1.96	120	.98
1927	N	Abergorlech	2	July 12	.98	35	1.68
1935	V.R	"	2	June 25	2.95	120	1.47
1944	R	Carmarthen, St. David's Ave	2	Aug. 6	2.50	90	1.67
1957	N	" " " "	2	July 20	1.45	60	1.45
Cardiganshire							
1878	N	Llechryd, Castle Malgwyn	3	June 29	1.40	60	1.40
1920	R	Lampeter, Falcondale	3	May 25	1.45	50	1.74
1935	N	Llechryd, Castle Malgwyn	3	June 23	.75	15	3.00
1937	N	Cardigan, Plas Llangoedmore	3	Aug. 11	1.30	90	.87
1946	R	Llandussul, Sychpant Horeb	3	Sep. 20	2.34	120	1.17
1953	N	Llandyssul, Joyous Gard	3	Sep. 15	1.24	100	.74
1955	N	" " "	3	Aug. 17	.56	11	3.05
1957	V.R	Nantcwnlle, Bwlchyllan	2	June 8	3.05	120	1.53
1957	V.R	" "	2	Aug. 5	3.43	120	1.71
1958	N	" "	2	July 14	.65	15	2.60
1958	R	" "	2	Sep. 14	2.16	100	1.30
1960		" Bwlchoraig	2	Aug. 27	1.49	120	.75
Glamorganshire							
1878	R	Cardiff	6	June 16	1.78	60	1.78
1878	R	" Cemetery	6	Aug. 23	2.00	120	1.00
1880	V.R	Cowbridge, Ash Hall	5	July 22	2.90	30	5.80
1886	R	Swansea, Morriston	3	Sep. 4	1.93	120	.97
1888	N	Dowlais, Cwm Bargoed	6	June 25	.66	15	2.64
"	R	Ystalyfera, Tan-yr-Allt	3	July 5	1.63	40	2.45
"	R	Dowlais, Cwm Pargoed	6	July 17	2.09	90	1.39
"	N	Ystalyfera, Tan-yr-Allt	3	July 1	1.55	90	1.03
1890	N	Gower, Pilton Green	2	May 25	1.20	90	.80
1890	N	Swansea	3	May 25	1.53	93	.99
1897	N	Dowlais, Gwernllwyn	6	June 5	.81	30	1.62
1898	R	Pontypridd, Maesderwyn	6	Nov. 2	2.24	120	1.12
1899	V.R	Barry W.W, Biglis	5	July 23	2.50	70	2.14
1913	N	Briton Ferry, Brynsiriol	4	Nov. 11	.75	15	3.00
1915	R	" " , Cefn Court	4	Aug. 2	1.25	20	3.75
1917	N	Bridgend, Highmead	5	May 29	1.18	70	1.01
1930	N	Port Talbot, Groeswen Canal	5	Sep. 11	1.48	105	.85
1935	N	Heath, Cimla Res.	4	June 25	1.00	30	2.00
"	N	" , Gnoll Res.	4	June 25	1.00	30	2.00
1936	N	Barry, Porth-y-Castell	5	June 30	.75	21	2.14
1938	R	Maesteg, Salisbury Rd.	5	Oct. 12	1.57	51	1.85
1939	N	Merthyr Tydfil, Hanover St.	6	July 21	1.48	95	.93
"	N	Llandeff, Pwllmelyn	6	July 21	1.57	105	.90

Year	Class	Station	Riv. Div.	Date	Amt. in.	D'r'n	Rate in/hr.
Glamorganshire (continued)							
1944	N	St. Athan	5	May 31	1.20	75	.96
1949	R	Dowlais	6	Aug. 25	1.57	30	3.14
"	R	Ystrad Mynach, Park Lane	7	July 16	2.57	120	1.29
1953	R	Pontypridd, Boy's Grammar Sch.	6	June 26	1.20	30	2.40
"	R	" , Coedpenmaen Road	6	June 26	1.20	30	2.40
"	N	" , Treforest Sec. Sch.	3	June 26	.96	30	1.92
"	R	Ystalyfera, Wern Ho.	3	June 26	1.61	50	1.93
"	N	Maesteg, Welfare Pk.	5	Aug. 19	1.21	90	.81
1955	V.R	Pontypridd, Coedpenmaen Rd.	6	June 6	2.92	40	4.38
"	N	Merthyr Tydfil	6	June 6	1.50	96	.94
"	V.R	Neath, Gnoll Res.	4	July 18	3.32	120	1.66
1958	N	Clydach	3	Aug. 19	1.56	20	4.68
1959	R	Rhoose Airfield	5	Aug. 10	1.53	60	1.53
Radnorshire							
1878	N	Rhayader, Nantgwillt	1	Aug. 3	.58	12	2.90
1886	N	Glasbury, Woodlands	1	June 2	1.27	120	.63
1900	R	Llandrindod Wells	1	July 12	2.39	90	1.59
1939	N	Lansaintfraed-in-Elvel	1	July 20	.97	22	2.65
1949	V.R	Prestiegne, Evancoyd	1	Sep. 22	2.75	80	2.06
1957	N	Birmingham W.W., Ciloerwynt	1	Aug. 5	1.20	120	.60
Brecknockshire							
1893	N	Glasbury, Gwernfed Pk.	8	June 19	1.40	60	1.40
1896	N	Builth, Abergwesyn Vic.	8	Sep. 9	.93	28	1.99
1899	N	Brecon, Llandefaelog-Fach	7	Sep. 5	1.50	75	1.20
1907	N	Llangammarch Wells	8	July 22	1.10	45	1.45
1932	V.R	Glasbury, Gwernfed Pk.	8	Aug. 21	2.25	60	2.25
1934	R	Llanafanfawr Sch.	8	Aug. 6	2.01	55	2.19
1936	N	Crickhowell, Dan-y-parc	7	June 20	.91	30	1.82
1941	V.R	Cardiff W.W., Beacons Res.	4	Oct. 5	2.25	57	2.37
1941	R	" " " "	4	Oct. 5	2.35	120	1.17
1946	R	" " , Cantref Res.	4	June 23	2.21	115	1.15
Monmouthshire							
1865	N	Abergavenney	3	Oct. 9	.94	30	1.88
1883	R	Chepstow, Dermel Hill	3	June 25	1.35	30	2.70
1893	N	" , Shirenewton Hall	3	June 4	.62	5	7.44
1899	N	Abergavenney, Dyne Ho.	3	July 7	1.14	80	.85
1910	N	"	3	May 16	.71	14	3.04
1915	V.R	" , The Chain	3	July 4	2.20	30	4.40
1935	V.R	Portskewett, Sudbrook	3	June 25	2.77	70	2.37
"	N	Chepstow, Itton Court	3	Sep. 22	1.66	90	1.11
1936	N	Blackwood	2	June 29	1.00	20	3.00
1937	R	Newport W.W., Friar St. Yard	3	Aug. 12	1.71	75	1.37
"	R	Abersychan, Glansychan	3	July 15	1.93	120	.97
1939	N	Tredegar Laboratory	2	July 19	.98	35	1.68
1945	V.R	Newport W.W., Friar St. Yard	3	Aug. 28	2.98	114	1.57
1949	R	Tredegar, Poplar Rd.	2	Oct. 25	1.75	60	1.75
1959	R	Brynderi, Llandilio Crosseny Sch.	4	June 25	1.87	120	.93
Gloucestershire							
1923	N	St. Briavels Ho.	1	July 31	1.00	60	1.00
Herefordshire							
1875	N	Staunton-on-Wye	1	June 3	1.05	60	1.05
"	R	Kington, Lynhales	1	Aug. 12	2.00	120	1.00
1878	R	Hereford, Stretton	1	Sep. 6	1.84	60	1.84

Year	Class	Station	Riv. Dir.	Date	Amt. in.	D'r'n	Rate in/hr.
Herefordshire (continued)							
1880	N	Ross, The Graig	1	July 10	.67	15	2.68
1881	N	" " "	1	Aug. 23	1.02	30	2.04
"	N	" " "	1	" 23	1.42	90	.95
1895	N	Weobley, Dilwyn	1	June 26	.86	20	2.58
1898	N	Ross, The Graig	1	Aug. 21	.90	40	1.35
1903	N	" , Perrystone Court	1	May 5	1.12	45	1.49
1904	N	Kington, Gravel Hill	1	July 25	.83	27	1.84
1906	N	Bromyard, Rowden Abbey	1	June 10	.87	30	1.74
1907	N	" , Buckenhill	1	July 21	1.10	60	1.10
1910	N	Kentchurch Rec.	1	May 16	.80	25	1.92
"	N	" "	1	June 8	.90	30	1.80
1913	N	Kington	1	Oct. 6	1.08	25	2.59
1915	N	Kentchurch Rec.	1	July 4	.85	30	1.70
1920	N	Ross, Perrystone Ct.	1	June 17	1.07	30	2.14
"	N	Almeley, The Bungalow	1	Mar. 30	1.06	43	1.40
1924	N	Kimbolton, Grantsfield	1	June 17	.78	20	2.34
"	N	Ross, Perrystone Ct.	1	May 19	.68	20	2.04
"	V.R	Humber Rec.	1	May 31	2.99	105	1.71
1934	R	Kimbolton, Grantsfield	1	July 12	1.50	45	2.00
"	R	Sarnesfield Court	1	July 11	2.04	90	1.36
1935	R	" "	1	June 5	1.35	30	2.70
1937	N	Ross-on-Wye	1	July 15	.83	30	1.66
1938	N	Bromyard, Birchyfields	1	Aug. 5	1.17	60	1.17
1940	N	Ross-on-Wye	1	Apr. 28	1.20	80	.90
1942	N	Hoarwithy	1	Mar. 18	1.10	55	1.20
1943	N	Dorstone, Oaklands	1	Sep. 13	1.00	30	2.00
"	N	Ross-on-Wye	1	Sep. 12	1.21	96	.76
1955	N	Hereford Sew. Wks.	1	July 13	.88	30	1.76
1957	V.R	Clifford School	1	Aug. 5	4.11	90	2.74
1958	N	Presteigne, Middlemoor	1	Aug. 22	1.04	75	.82
1960	R	Vowchurch, Ladywell Ho.	1	Aug. 7	1.17	25	2.81

Key. N = Noteworthy
R = Remarkable
V.R = Very Rare

Classification used in British Rainfall.

Pembrokeshire	1	Teifi
	2	Nevern & C
	3	West Coast Streams
	4	Cleddau
Carmarthenshire	1	Teifi
	2	Towy & C
	3	Loughor & C
	4	Tawe
	5	Usk
	6	Wye
Cardiganshire	2	Ystwyth & C
	3	Teifi
	4	Towy
	5	Wye

Glamorganshire	1	Loughor
	2	Gower Peninsula
	3	Tawe
	4	Neath
	5	Ogmore
	6	Taff
	7	Rhymney
Radnorshire	1	Wye
Brecknockshire	1	Towy
	2	Tawe
	3	Neath
	4	Taff
	5	Rhymney
	6	Ebbw
	7	Usk
	8	Wye
Montgomeryshire	2	Ystwyth
Monmouthshire	1	Rhymney
	2	Ebbw
	3	Usk and C
	4	Wye
Gloucestershire	1	Wye
Herefordshire	1	Wye

Fig 1a.

Average Monthly Rainfall as a percentage of Average Annual Rainfall (1916-1950) January-June.

Fig 1b.

Average Monthly Rainfall as a percentage of Average Annual Rainfall (1916-1950) July - December.

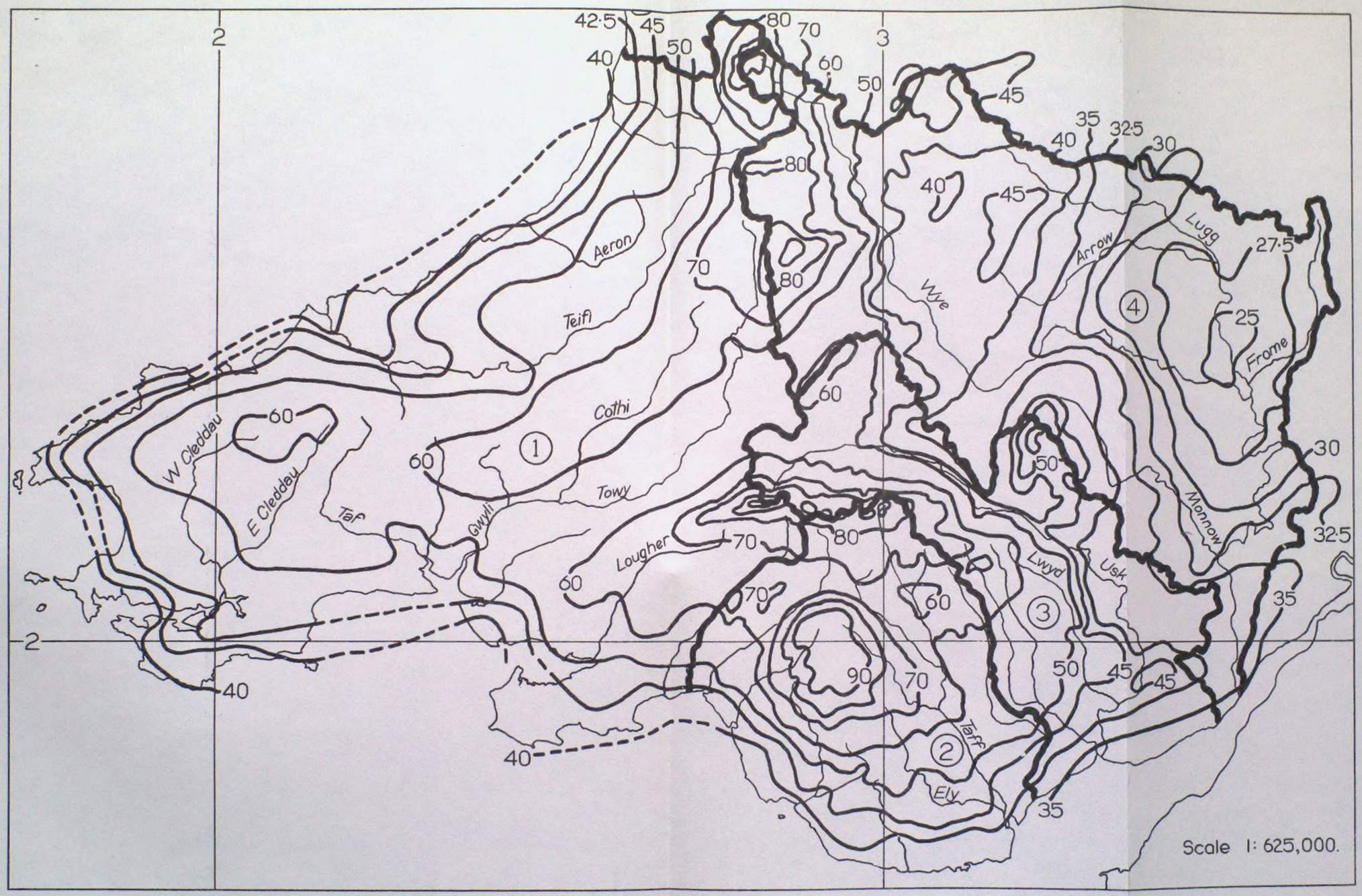

Fig 2. AVERAGE ANNUAL RAINFALL 1916-1950, (in inches) over the River Board areas of :- ① South West Wales
② Glamorgan
③ the Usk
④ the Wye